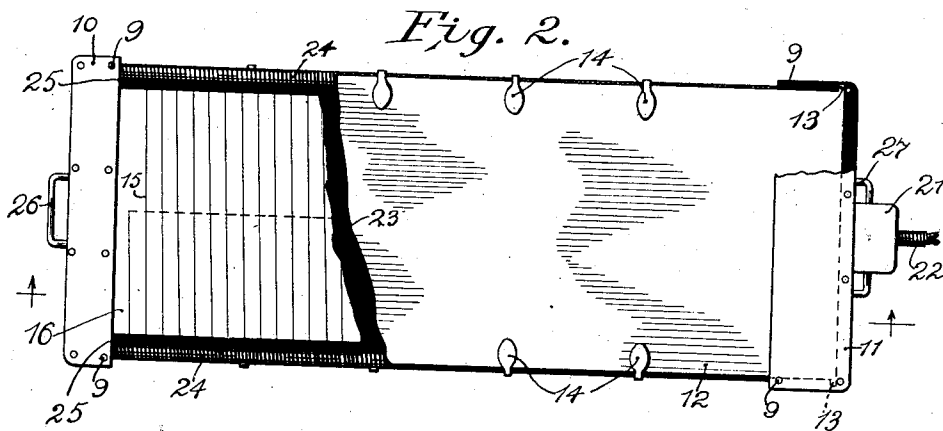
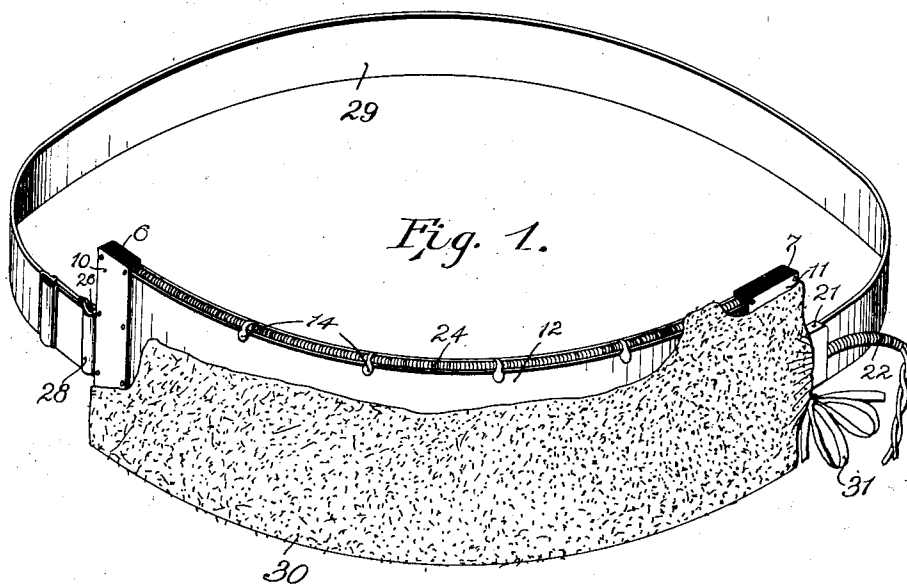


H. H. INGERSOLL.
ELECTRIC HEATER.
APPLICATION FILED APR. 30, 1915.

1,162,363.

Patented Nov. 30, 1915.
2 SHEETS—SHEET 1.



Witnesses:
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By Joshua A. Torpe
His attorney.

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2 SHEETS—SHEET 2.

Fig. 3.

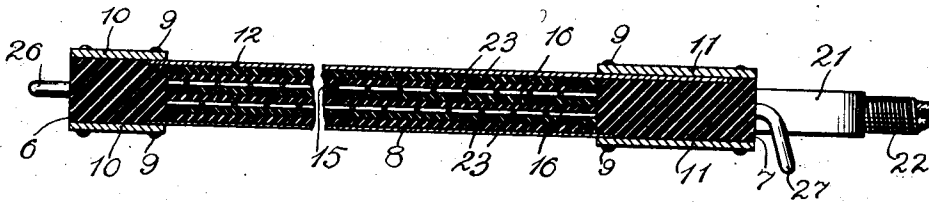
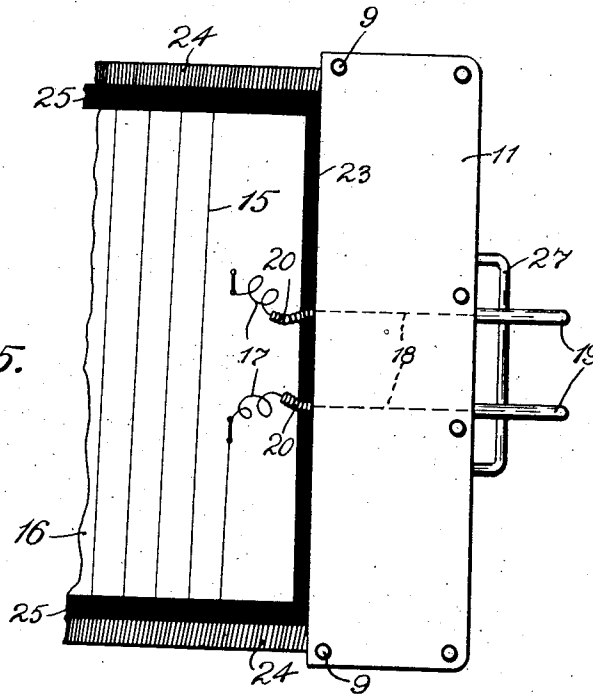


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

HOMER H. INGERSOLL, OF CHICAGO, ILLINOIS, ASSIGNOR TO INGERSOLL ELECTRIC VAPORIZOR CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ELECTRIC HEATER.

1,162,363.

Specification of Letters Patent.

Patented Nov. 30, 1915.

Application filed April 30, 1915. Serial No. 24,952.

To all whom it may concern:

Be it known that I, HOMER H. INGERSOLL, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Electric Heaters, of which the following is a specification.

My invention relates to improvements in electric heaters and has for its object the provision of an improved heater of this character especially adapted for application to the human body.

My invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a perspective view of a construction embodying my invention, showing portions broken away, Fig. 2, a plan view of a heating casing employed in the construction with portions broken away, Fig. 3, an enlarged longitudinal section through a heating casing, Fig. 4, a transverse section through said casing, and Fig. 5, an enlarged plan view of one end of the heating casing with the upper side thereof removed.

The preferred form of construction as illustrated in the drawings comprises blocks 6 and 7 of hard rubber or other suitable insulating material connected together at one side by means of a flexible metallic plate 8 secured to said blocks by means of rivets 9 which also serve as partial means for securing cover plates 10 and 11 to said blocks as will be readily understood. The other sides of blocks 6 and 7 are connected by means of a flexible metallic plate 12, one end of which is anchored to block 6 by means of the rivets 9 which also serve to assist in securing cover plate 10 to said block. The other end of plate 12 slides under a corresponding cover plate 11 on block 7 secured thereto by rivets 9, and is provided at its ends with laterally extending shoulders 13 adapted to engage the rivets 9 as indicated to limit the sliding movement of plate 12 with reference to block 7.

Clips or fingers 14 are secured to plate 8 and slidably engage over plate 12 as shown so as to permit of perfect longitudinal freedom of plate 12 and sliding relatively to

other parts of the construction both at its free end and along its edges.

A heating coil consisting of a fine wire 15 is wound about two sheets of asbestos or other suitable insulating material 16 the ends 17 of said coil being connected by means of wires 18 with contact posts 19 situated on the outer side of block 7, the inner portions of wires 18 being surrounded by beads 20 of insulating material so as to furnish a durable and effective insulation for these wires 18. A block 21 is equipped with an ordinary current supply cord 22 and suitable sockets for receiving posts 19 so as to effect an electric connection with the ends of wires 15 to supply current thereto as will be readily understood. Two sheets 23 of asbestos or other suitable insulating material are arranged on each side of coil 15 so as to insulate the same from plates 8 and 12 and helical springs 24 are positioned between the edges of plates 8 and 12 to constitute flexible edges for the heating casing. Cords 25 of asbestos are interposed between the edges of sheets 16 and 23 and the corresponding springs 24 so as to effect good electrical insulation here. By this arrangement, a flexible heating casing is provided which is capable of being adjusted to different curvatures of the body and in which the heating coil is adequately insulated. By providing a metallic casing for the heating coil, the same may be employed in conjunction with damp applications thus greatly facilitating the application and effectiveness thereof.

A loop 26 is secured to block 6 and a loop 27 is secured to block 7 adapted to engage hooks 28 on the ends of a flexible elastic adjustable belt 29 adapted to pass around the body or a portion thereof and hold the casing in position.

A cover bag 30 of suitable cloth and provided with a draw string 31 is also provided for the heating casing for use when it is desired to apply dry heat, suitable openings being provided at the ends of said bag to permit of the protrusion of the loops 26 and 27 as will be readily understood.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the

precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

8 Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. An electric heater comprising a flexible casing, one side of said casing comprising a
10 plate slidable with relation to other parts thereof; and a heating coil in said casing, substantially as described.

2. An electric heater comprising a flexible casing, one side of said casing comprising a
15 plate anchored at one end and slidable at its edges and other end with respect to the other parts of said casing; and a heating coil in said casing, substantially as described.

20 3. An electric heater comprising a flexible casing, one side of said casing comprising a plate anchored at one end and slidable, at its edges and other end with respect to the other parts of said casing; a heating coil
25 in said casing; and an attaching strap secured to the ends of said casing, substantially as described.

4. An electric heater comprising two end
30 blocks of insulating material; a flexible metallic plate secured at its end to one of

said blocks and constituting one side of a flexible casing; a flexible metallic plate constituting the other side of said casing and having one end secured to one of said blocks and slidable with relation to other parts
35 thereof; slidable connections between the edges of said plates and a heating coil in said casing; and insulated therefrom, substantially as described.

5. An electric heater comprising two end
40 blocks of insulating material; a flexible metallic plate secured at its end to one of said blocks and constituting one side of a flexible casing; a flexible metallic plate constituting the other side of said casing and
45 having one end secured to one of said blocks and slidable with relation to other parts thereof; slidable connections between the edges of said plates; a heating coil in said casing, and insulated therefrom; loops at
50 the ends of said casing; and an attaching strap detachably engaging with said loops, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of
55 two subscribing witnesses.

HOMER H. INGERSOLL.

Witnesses:

JOSHUA R. H. POTTS,
HELEN F. LILLIS.